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345 Park Avenue  
New York, NY 10154

EXAMINER

MISLEH, JUSTIN P

ART UNIT	PAPER NUMBER
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2612

3

DATE MAILED: 08/29/2003

Please find below and/or attached an Office communication concerning this application or proceeding.

**Office Action Summary**

Application No.

09/501,017

Applicant(s)

HIEDA, TERUO

Examiner

Justin P Misleh

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☐ Responsive to communication(s) filed on \_\_\_\_.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1 - 12 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1 - 12 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☒ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 09 February 2000 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on \_\_\_\_ is: a) ☐ approved b) ☐ disapproved by the Examiner.  
If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

**Priority under 35 U.S.C. §§ 119 and 120**

- 13) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some \* c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- \* See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).
- a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

**Attachment(s)**

- |  |   |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)                  | 4) <input type="checkbox"/> Interview Summary (PTO-413) Paper No(s). ____.  |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)         | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449) Paper No(s) ____. | 6) <input type="checkbox"/> Other: ____.                                    |

## DETAILED ACTION

### *Specification*

1. The title of the invention is not descriptive. A new title is required that is clearly indicative of the invention to which the claims are directed.
2. The disclosure is objected to because of the following informalities: typographical error. Page 5, line 10 of the specification states "sensing drive". After examination of the remainder of the specification, the Examiner believes the specification should be corrected to state "sensing device".

Appropriate correction is required.

### *Claim Rejections - 35 USC § 102*

3. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

4. **Claims 1, 3 – 5, 7, and 8** are rejected under 35 U.S.C. 102(b) as being anticipated by Kaji et al. For the following rejections please refer to figures 6 – 8 and as stated in columns 3 (lines 42 – 62), 4 (lines 30 – 53), and 5 (lines 25 – 54).

5. For **claim 1**, Kaji et al. disclose, an image processing apparatus comprising:

detecting means (high brightness detector 22b, as shown in figure 8) for detecting, in an entered image signal (the image signal, which is the signal directly output from the sample and

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hold circuit 8, is input into the LPF 22a and is then entered in the high brightness detector 22b/detecting means), a high-luminance portion that exceeds a predetermined value (see column 4, lines 37 – 42);

generating means (also provided in the high brightness detector 22b/detecting means) for generating a control signal (see column 4, lines 37 – 42), which has a prescribed waveform at the periphery of the high-luminance portion of the image signal (as stated in column 4, lines 42 – 46, the gain of the variable gain amplifier 22c drops whenever a high-luminance portion is detected; see below for further explanation), in dependence upon the detection made by said detecting means (the high brightness detector 22b/detecting means/generating means generates a control signal dependent upon the detection made by the same);

separating means for separating a color signal from the image signal (sample and hold circuits 9, 10, and 11 separate the color signal R, G, Cy from the image signal, which is the signal directly output from the sample and hold circuit 8); and

suppression means (variable gain amplifier 22c) for suppressing the separated color signal by the control signal (only the separated color signal is input, from switch 18, into the suppression means).

Since the entire image signal is entered into the high brightness detector 22b/detecting means/generating means to determine high brightness areas in the image signal, which are accordingly suppressed by a drop in the gain of the variable gain amplifier 22c/suppressing means, a control signal provided to the variable gain amplifier inherently is a prescribed waveform encompassing the entire image signal, which includes the periphery of the high luminance portion.

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6. As for **claim 3**, Kaji et al. disclose, the apparatus according to claim 1, wherein the image signal (which is the signal directly output from the sample and hold circuit 8) is a signal of an image captured by image sensing means (CCD image sensor 5), and said detecting means (high brightness detector 22b) detects a saturated portion of said image sensing means as the high-luminance portion (see column 4, lines 37 – 46).

7. As for **claim 4**, Kaji et al. disclose, the apparatus according to claim 1, wherein the control signal (see column 4, lines 37 – 42) has a waveform for obtaining a suppression characteristic in which gain of the color signal is made zero in the high-luminance portion and suppression is reduced with distance from the high-luminance portion toward the periphery thereof and is eliminated at a location beyond a predetermined distance from the high-luminance portion.

Kaji et al. teach, as stated in column 4 (lines 42 – 46), that when the brightness level, of portions, of an entered image signal reaches the saturation level (high-luminance portions), the gain of the variable gain amplifier drops, thereby controlling the amplitude of the signal so that it becomes small and at the same time enabling the occurrence of the false color signal to be suppressed. The Examiner acknowledges that Kaji et al. only disclose *small*, however, the Examiner interprets *small* as to mean zero, since, the gain of the variable gain amplifier is made *small* when applied to the saturated high-luminance/high-brightness portions. If the gain of the variable gain amplifier is made *small* and not zero, the disclosure and teaching of Kaji et al. would not, simply because the saturated high-luminance/high-brightness portions are already saturated and adding a gain, even a *small* gain, would not suppress the *false color signals* as taught by Kaji et al.

In addition, with respect to the claimed limitation: ... suppression is reduced with distance from the high-luminance portion toward the periphery thereof and is eliminated at a location beyond a predetermined distance from the high-luminance portion. First and foremost, Kaji et al. teach that suppression is only applied to saturated high-luminance/ high-brightness portions, which when exceeding a predetermined saturation level are considered saturated, therefore, by assigning a predetermined saturation level, Kaji et al. effectively provides a predetermined distance from the saturated high-luminance/ high-brightness portions in suppression is eliminated. Secondly and finally, Kaji et al. teach, as stated in column 4 (lines 46 – 50), since the threshold level in detection of saturated high-luminance/ high-brightness portions can be set to a proper value, as the portions of output signal of the CCD approaches saturation, it is also possible to gradually reduce concentration of color little by little. Therefore, Kaji et al. teach the reduction of suppression as distance increases from the saturated high-luminance/ high-brightness portions.

8. As for **claim 5**, Kaji et al. disclose, an image processing method comprising:

a detecting step of detecting (high brightness detector 22b, as shown in figure 8), in an entered image signal (the image signal, which is the signal directly output from the sample and hold circuit 8, is input into the LPF 22a and is then entered in the high brightness detector 22b/detecting step), a high-luminance portion that exceeds a predetermined value (see column 4, lines 37 – 42);

a generating step of generating (also provided in the high brightness detector 22b/detecting step) a control signal (see column 4, lines 37 – 42), which has a prescribed waveform at the periphery of the high-luminance portion of the image signal (as stated in column

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4, lines 42 – 46, the gain of the variable gain amplifier 22c drops whenever a high-luminance portion is detected; see below for further explanation);

a separating step of separating a color signal from the image signal (sample and hold circuits 9, 10, and 11 separate the color signal R, G, Cy from the image signal, which is the signal directly output from the sample and hold circuit 8); and

a suppression step of suppressing (variable gain amplifier 22c) the separated color signal by the control signal (only the separated color signal is input, from switch 18, into the suppression step).

Since the entire image signal is entered into the high brightness detector 22b/detecting step/generating step to determine high brightness areas in the image signal, which are accordingly suppressed by a drop in the gain of the variable gain amplifier 22c/suppressing step, a control signal provided to the variable gain amplifier inherently is a prescribed waveform encompassing the entire image signal, which includes the periphery of the high luminance portion.

9. As for **claim 7**, Kaji et al. disclose, the method according to claim 5, wherein the image signal (which is the signal directly output from the sample and hold circuit 8) is a signal of an image captured by image sensing means (CCD image sensor 5), and said detecting step (high brightness detector 22b) detects a saturated portion of said image sensing means as the high-luminance portion (see column 4, lines 37 – 46).

10. As for **claim 8**, Kaji et al. disclose, the method according to claim 5, wherein the control signal (see column 4, lines 37 – 42) has a waveform for obtaining a suppression characteristic in which gain of the color signal is made zero in the high-luminance portion and suppression is

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reduced with distance from the high-luminance portion toward the periphery thereof and is eliminated at a location beyond a predetermined distance from the high-luminance portion.

Kaji et al. teach, as stated in column 4 (lines 42 – 46), that when the brightness level, of portions, of an entered image signal reaches the saturation level (high-luminance portions), the gain of the variable gain amplifier drops, thereby controlling the amplitude of the signal so that it becomes small and at the same time enabling the occurrence of the false color signal to be suppressed. The Examiner acknowledges that Kaji et al. only disclose *small*, however, the Examiner interprets *small* as to mean zero, since, the gain of the variable gain amplifier is made *small* when applied to the saturated high-luminance/high-brightness portions. If the gain of the variable gain amplifier is made *small* and not zero, the disclosure and teaching of Kaji et al. would not, simply because the saturated high-luminance/high-brightness portions are already saturated and adding a gain, even a *small* gain, would not suppress the *false color signals* as taught by Kaji et al.

In addition, with respect to the claimed limitation: ... suppression is reduced with distance from the high-luminance portion toward the periphery thereof and is eliminated at a location beyond a predetermined distance from the high-luminance portion. First and foremost, Kaji et al. teach that suppression is only applied to saturated high-luminance/ high-brightness portions, which when exceeding a predetermined saturation level are considered saturated, therefore, by assigning a predetermined saturation level, Kaji et al. effectively provides a predetermined distance from the saturated high-luminance/ high-brightness portions in suppression is eliminated. Secondly and finally, Kaji et al. teach, as stated in column 4 (lines 46 – 50), since the threshold level in detection of saturated high-luminance/ high-brightness portions



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can be set to a proper value, as the portions of output signal of the CCD approaches saturation, it is also possible to gradually reduce concentration of color little by little. Therefore, Kaji et al. teach the reduction of suppression as distance increases from the saturated high-luminance/ high-brightness portions.

***Claim Rejections - 35 USC § 103***

11. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

12. **Claims 9, 11, and 12** are rejected under 35 U.S.C. 103(a) as being unpatentable over Kaji et al. For the following rejections please refer to figures 6 – 8 and as stated in columns 3 (lines 42 – 62), 4 (lines 30 – 53), and 5 (lines 25 – 54).

13. For **claim 9**, Kaji et al. disclose, an image processing apparatus and method as stated above with respect claims 1 and 5, however, Kaji et al. do not disclose details of the implementation of the disclosed image processing apparatus and method (i.e. Kaji et al. do not disclose the implementation, of the image processing apparatus and method, in hardware, software, or firmware). Therefore, Kaji et al. do not disclose a computer-readable storage medium storing a program for executing the steps of the image processing method with respect to claim 5.

More specifically, Kaji et al. do not disclose a computer-readable storage medium storing a program for executing: detection processing for detecting, in an entered image signal, a high-

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luminance portion that exceeds a predetermined value; generation processing for generating a control signal, which has a prescribed waveform at the periphery of the sensed high-luminance portion of the image signal; separation processing for separating a color signal from the image signal; and suppression processing for suppressing the separated color signal by the control signal.

Official Notice is taken that both the concepts and the advantages of providing a computer-readable storage medium storing a program for executing the steps of the image processing method with respect to claim 5 are well-known and expected in the art. It would have been obvious to implement the image processing method of Kaji et al using a computer, software, and memory as means to provide a portable and fully automated image processing system.

14. As for **claim 11**, with respect to the Official Notice taken above, Kaji et al. disclose, the storage medium according to claim 9, wherein the image signal (which is the signal directly output from the sample and hold circuit 8) is a signal of an image captured by image sensing means (CCD image sensor 5), and said detecting processing (high brightness detector 22b) detects a saturated portion of said image sensing means as the high-luminance portion (see column 4, lines 37 – 46).

15. As for **claim 12**, with respect to the Official Notice taken above, Kaji et al. disclose, the storage medium according to claim 9, wherein the control signal (see column 4, lines 37 – 42) has a waveform for obtaining a suppression characteristic in which gain of the color signal is made zero in the high-luminance portion and suppression is reduced with distance from the high-

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luminance portion toward the periphery thereof and is eliminated at a location beyond a predetermined distance from the high-luminance portion.

Kaji et al. teach, as stated in column 4 (lines 42 – 46), that when the brightness level, of portions, of an entered image signal reaches the saturation level (high-luminance portions), the gain of the variable gain amplifier drops , thereby controlling the amplitude of the signal so that it becomes small and at the same time enabling the occurrence of the false color signal to be suppressed. The Examiner acknowledges that Kaji et al. only disclose *small*, however, the Examiner interprets *small* as to mean zero, since, the gain of the variable gain amplifier is made *small* when applied to the saturated high-luminance/high-brightness portions. If the gain of the variable gain amplifier is made *small* and not zero, the disclosure and teaching of Kaji et al. would not, simply because the saturated high-luminance/high-brightness portions are already saturated and adding a gain, even a *small* gain, would not suppress the *false color signals* as taught by Kaji et al.

In addition, with respect to the claimed limitation: ... suppression is reduced with distance from the high-luminance portion toward the periphery thereof and is eliminated at a location beyond a predetermined distance from the high-luminance portion. First and foremost, Kaji et al. teach that suppression is only applied to saturated high-luminance/ high-brightness portions, which when exceeding a predetermined saturation level are considered saturated, therefore, by assigning a predetermined saturation level, Kaji et al. effectively provides a predetermined distance from the saturated high-luminance/ high-brightness portions in suppression is eliminated. Secondly and finally, Kaji et al. teach, as stated in column 4 (lines 46 – 50), since the threshold level in detection of saturated high-luminance/ high-brightness portions

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can be set to a proper value, as the portions of output signal of the CCD approaches saturation, it is also possible to gradually reduce concentration of color little by little. Therefore, Kaji et al. teach the reduction of suppression as distance increases from the saturated high-luminance/ high-brightness portions.

16. **Claims 2, 6, and 10** are rejected under 35 U.S.C. 103(a) as being unpatentable over Kaji et al. in view of Hirata et al. For the following rejections please refer to figures 3 and 6 and as stated in columns 7 (lines 22 – 67), 8, and 9 (lines 1 – 19).

17. For **claim 2**, Kaji et al. disclose, an image processing apparatus comprising a detecting means, a generating means for generating a control signal in dependence upon the detection made by the detection means, and a suppression means for suppressing a color image signal. Kaji et al. do not disclose the image processing apparatus further comprising: first storage means for storing an output from said detecting means, wherein said generating means generates the control signal in dependence upon an output from said first storage means; and second storage means for storing this control signal, wherein said suppression means suppresses the color signal using the control signal read out of said second storage means.

Hirata et al. also disclose, as shown in figure 6, an image processing apparatus comprising a detecting means (573), a generating means (575) for generating a control signal in dependence upon the detection made by the detection means, and a suppression means (576) for suppressing a color image signal. Hirata et al. disclose, the image processing apparatus further comprising: first storage means (provided by CPU 70; see below for explanation) for storing an output from said detecting means (573), wherein said generating means (575) generates the control signal (coefficients) in dependence upon an output from said first storage means (the

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CPU 70 outputs to the generating means 575); and second storage means (RAM 72) for storing this control signal (RAM 72 stores the coefficients), wherein said suppression means (576) suppresses the color signal (provided by HVC converter 571) using the control signal read out of said second storage means.

Hirata et al. teach, as stated in column 8 (lines 26 – 42), the detecting means (573) detects saturation of the image signal based upon a predetermined saturation stored in ROM (71). The results of the detection are sent from the detecting means (573) to the CPU 70 (first storage means). The CPU 70 (first storage means) instructs the generating means (575) to generate a control signal (coefficients  $K_j$ ). Once the control signal (coefficients  $K_j$ ) is generated, it is sent back to the CPU 70 (first storage means) and is then stored in RAM 72 (second storage means). The control signal (coefficients  $K_j$ ) is read out from RAM 72 (second storage means) and sent to the suppression means (576) to suppress the color signal. The Examiner interprets CPU 70 as the first storage means, since it is inherent to all CPUs to have working storage or working memories to store information. Therefore, since the detecting means sends its results to the CPU 70, it is in fact sending its results to the first storage means. At the time the invention was made, one with ordinary skill in the art would have been motivated to include a first and second storage means in the arrangement taught by Hirata et al. in the image processing apparatus of Kaji et al. as a means to include temporary storage locations so as to provide each of the detecting means, generating means, and suppressing means the opportunity to perform their respective processes on entire image signals rather than a continuous stream of partial image signals. Therefore, at the time the invention was made, it would have been obvious to one with ordinary skill in the art

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to include a first and second storage means in the arrangement taught by Hirata et al. in the image processing apparatus of Kaji et al.

18. As for **claim 6**, Kaji et al. disclose, an image processing method comprising a detecting step, a generating step for generating a control signal in dependence upon the detection made by the detection step, and a suppression step for suppressing a color image signal. Kaji et al. do not disclose the image processing method further comprising: a first storage step for storing the detected high-luminance portion, wherein said generating step generates the control signal in dependence upon the stored high-luminance portion; and a second storage step for storing this control signal, wherein said suppression step suppresses the color signal using the control signal read out of said second storage step.

Hirata et al. also disclose, as shown in figure 6, an image processing method comprising a detecting step (573), a generating step (575) for generating a control signal in dependence upon the detection made by the detection step, and a suppression step (576) for suppressing a color image signal. Hirata et al. disclose, the image processing method further comprising: a first storage step (provided by CPU 70; see below for explanation) for storing the detected high-luminance portion, wherein said generating step (575) generates the control signal (coefficients) in dependence upon the stored high-luminance portion (the CPU 70 outputs to the generating step 575); and a second storage step (RAM 72) for storing this control signal (RAM 72 stores the coefficients), wherein said suppression step (576) suppresses the color signal (provided by HVC converter 571) using the control signal read out of said second storage step.

Hirata et al. teach, as stated in column 8 (lines 26 – 42), the detecting step (573) detects saturation of the image signal based upon a predetermined saturation stored in ROM (71). The

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results of the detection are sent from the detecting step (573) to the CPU 70 (first storage step). The CPU 70 (first storage step) instructs the generating step (575) to generate a control signal (coefficients  $K_j$ ). Once the control signal (coefficients  $K_j$ ) is generated, it is sent back to the CPU 70 (first storage step) and is then stored in RAM 72 (second storage step). The control signal (coefficients  $K_j$ ) is read out from RAM 72 (second storage step) and sent to the suppression step (576) to suppress the color signal. The Examiner interprets CPU 70 as the first storage step, since it is inherent to all CPUs to have working storage or working memory steps to store information. Therefore, since the detecting step sends its results to the CPU 70, it is in fact sending performing the first storage step. At the time the invention was made, one with ordinary skill in the art would have been motivated to include a first and second storage step in the arrangement taught by Hirata et al. in the image processing method of Kaji et al. as a means to include temporary storage steps so as to provide each of the detecting step, generating step, and suppressing step the opportunity to perform their respective processes on entire image signals rather than a continuous stream of partial image signals. Therefore, at the time the invention was made, it would have been obvious to one with ordinary skill in the art to include a first and second storage step in the arrangement taught by Hirata et al. in the image processing method of Kaji et al.

19. As for **claim 10**, with respect to the Official Notice taken above, Kaji et al. disclose, a computer-readable storage medium storing a program for executing detection processing, generation processing for generating a control signal in dependence upon the detection made by the detection processing, and suppression processing for suppressing a color image signal. Kaji et al. do not disclose the computer-readable storage medium further storing: a program for

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executing processing for storing the detected high-luminance portion, wherein said generation processing generates the control signal in dependence upon the stored high-luminance portion; and a program for executing processing for storing this control signal, wherein said suppression processing suppresses the color signal upon reading out the stored control signal.

Hirata et al. also disclose, as shown in figure 6, a computer-readable storage medium storing a program for executing detection processing (573), generation processing (575) for generating a control signal in dependence upon the detection made by the detection processing, and suppression processing (576) for suppressing a color image signal. Hirata et al. disclose, the computer-readable storage medium further storing: a program for executing processing for storing (provided by CPU 70; see below for explanation) the detected high-luminance portion, wherein said generation processing (575) generates the control signal (coefficients) in dependence upon the stored high-luminance portion (the CPU 70 outputs to the generating step 575); and a program for executing processing for storing (RAM 72) this control signal (RAM 72 stores the coefficients), wherein said suppression step (576) suppresses the color signal (provided by HVC converter 571) upon reading out the stored control signal.

Hirata et al. teach, as stated in column 8 (lines 26 – 42), the detection program (573) detects saturation of the image signal based upon a predetermined saturation stored in ROM (71). The results of the detection program are sent from the detecting program (573) to the CPU 70. The CPU 70 instructs the generation program (575) to generate a control signal (coefficients K<sub>j</sub>). Once the control signal (coefficients K<sub>j</sub>) is generated, it is sent back to the CPU 70 and is then stored in RAM 72. The control signal (coefficients K<sub>j</sub>) is read out from RAM 72 and sent to the suppression program (576) to suppress the color signal. At the time the invention was made, one



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with ordinary skill in the art would have been motivated to include a program for executing processing for storing the detected high-luminance portion and a program for executing processing for storing the control signal as taught by Hirata et al. in the computer-readable storage medium storing a program of Kaji et al. as a means to include temporary storage programs so as to provide each of the detection program, generation program, and suppression program the opportunity to perform their respective processes on entire image signals rather than a continuous stream of partial image signals. Therefore, at the time the invention was made, it would have been obvious to one with ordinary skill in the art to include a program for executing processing for storing the detected high-luminance portion and a program for executing processing for storing the control signal as taught by Hirata et al. in the computer-readable storage medium storing a program of Kaji et al.

### *Conclusion*

20. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. The prior art also teach of detection means/steps/programs, generation means/steps/programs, and suppression means/steps/programs for detecting a high-luminance portion of an image signal, generating a control signal based upon the detected saturated high-luminance portion, and then suppressing the saturated high-luminance portions .

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Any inquiry concerning this communication or earlier communications from the examiner should be directed to Justin P Misleh whose telephone number is 703.305.8090. The examiner can normally be reached on Monday - Friday, 8 am - 5 pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Wendy R Garber can be reached on 703.305.4929. The fax phone number for the organization where this application or proceeding is assigned is (703) 872-9306.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the Technology Center 2600 Customer Service Office whose telephone number is 703.306.0377.

JPM

August 20, 2003

  
WENDY R. GARBER  
SUPERVISORY PATENT EXAMINER  
TECHNOLOGY CENTER 2600